

TABLE 3.3-10

POST-ACCIDENT MONITORING INSTRUMENTATION

<u>INSTRUMENT</u>	<u>REQUIRED NUMBER OF CHANNELS</u>	<u>MINIMUM CHANNELS OPERABLE</u>	<u>ACTION</u>
1. Containment Pressure	2	1	29,30
2. Reactor Coolant Outlet Temperature - T_{hot} (Wide Range)	2	1/loop	29,30
3. Reactor Coolant Inlet Temperature - T_{cold} (Wide Range)	2	1/loop	29,30
4. Pressurizer Pressure - Wide Range	2	1	29,30
5. Pressurizer Water Level	2	1	29,30
6. Steam Generator Pressure	2/steam generator	1/steam generator	29,30
7. Steam Generator Water Level - Wide Range	2/steam generator	1/steam generator	29,30
8. Refueling Water Storage Tank Water Level	2	1	29,30
9. Auxiliary Feedwater Flow Rate	2	1	29,30
10. Reactor Cooling System Subcooling Margin Monitor	2	1	29,30
11. Pressurizer Safety Valve Position Indicator	1/valve	1/valve	29,30
12. Containment Water Level (Narrow Range)	2	1	29,30
13. Containment Water Level (Wide Range)	2	1	29,30
14. Core Exit Thermocouples	4/core quadrant	2/core quadrant	29,30
15. Reactor Vessel Water Level	2*	1*	31,32
16. Neutron Flux Monitor (Power Range)	2	1	29,30

Reactor Coolant System

*A channel is eight sensors in a probe. A channel is OPERABLE if four or more sensors, two or more in the upper four and two or more in the lower four, are OPERABLE.

TABLE 4.3-7

POST-ACCIDENT MONITORING INSTRUMENTATION SURVEILLANCE REQUIREMENTS

<u>INSTRUMENT</u>	<u>CHANNEL CHECK</u>	<u>CHANNEL CALIBRATION</u>
1. Containment Pressure	M	R
2. Reactor Coolant Outlet Temperature - T_{hot} (Wide Range)	M	R
3. Reactor Coolant Inlet Temperature - T_{cold} (Wide Range)	M	R
4. Pressurizer Pressure - Wide Range	M	R
5. Pressurizer Water Level	M	R
6. Steam Generator Pressure	M	R
7. Steam Generator Water Level - Wide Range	M	R
8. Refueling Water Storage Tank Water Level	M	R
9. Auxiliary Feedwater Flow Rate	M	R
10. Reactor Coolant System Subcooling Margin Monitor	M	R
11. Pressurizer Safety Valve Position Indicator	M	R
12. Containment Water Level (Narrow Range)	M	R
13. Containment Water Level (Wide Range)	M	R
14. Core Exit Thermocouples	M	R
15. Reactor Vessel Water Level	M	R
16. Neutron Flux Monitor (Power Range)	M	R

Reactor Coolant System

TABLE 3.3-10

POST-ACCIDENT MONITORING INSTRUMENTATION

<u>INSTRUMENT</u>	<u>REQUIRED NUMBER OF CHANNELS</u>	<u>MINIMUM CHANNELS OPERABLE</u>	<u>ACTION</u>
1. Containment Pressure	2	1	29,30
2. Reactor Coolant Outlet Temperature - T_{hot} (Wide Range)	2	1/loop	29,30
3. Reactor Coolant Inlet Temperature - T_{cold} (Wide Range)	2	1/loop	29,30
4. Pressurizer Pressure - Wide Range	2	1	29,30
5. Pressurizer Water Level	2	1	29,30
6. Steam Generator Pressure	2/steam generator	1/steam generator	29,30
7. Steam Generator Water Level - Wide Range	2/steam generator	1/steam generator	29,30
8. Refueling Water Storage Tank Water Level	2	1	29,30
9. Auxiliary Feedwater Flow Rate	2	1	29,30
10. Reactor Cooling System Subcooling Margin Monitor	2	1	29,30
11. Pressurizer Safety Valve Position Indicator	1/valve	1/valve	29,30
12. Containment Water Level (Narrow Range)	2	1	29,30
13. Containment Water Level (Wide Range)	2	1	29,30
14. Core Exit Thermocouples	4/core quadrant	2/core quadrant	29,30
15. Reactor Vessel Water Level	2*	1*	31,32
16. Neutron Flux Monitor (Power Range)	2	1	29,30

Reactor Coolant System

*A channel is eight sensors in a probe. A channel is OPERABLE if four or more sensors, two or more in the upper four and two or more in the lower four, are OPERABLE.

TABLE 4.3-7

POST-ACCIDENT MONITORING INSTRUMENTATION SURVEILLANCE REQUIREMENTS

<u>INSTRUMENT</u>	<u>CHANNEL CHECK</u>	<u>CHANNEL CALIBRATION</u>
1. Containment Pressure	M	R
2. Reactor Coolant Outlet Temperature - T_{hot} (Wide Range)	M	R
3. Reactor Coolant Inlet Temperature - T_{cold} (Wide Range)	M	R
4. Pressurizer Pressure - Wide Range	M	R
5. Pressurizer Water Level	M	R
6. Steam Generator Pressure	M	R
7. Steam Generator Water Level - Wide Range	M	R
8. Refueling Water Storage Tank Water Level	M	R
9. Auxiliary Feedwater Flow Rate	M	R
10. Reactor Coolant System Subcooling Margin Monitor	M	R
11. Pressurizer Safety Valve Position Indicator	M	R
12. Containment Water Level (Narrow Range)	M	R
13. Containment Water Level (Wide Range)	M	R
14. Core Exit Thermocouples	M	R
15. Reactor Vessel Water Level	M	R
16. Neutron Flux Monitor (Power Range)	M	R

Reactor Coolant System

TABLE 3.3-10

POST-ACCIDENT MONITORING INSTRUMENTATION

<u>INSTRUMENT</u>	<u>REQUIRED NUMBER OF CHANNELS</u>	<u>MINIMUM CHANNELS OPERABLE</u>	<u>ACTION</u>
1. Containment Pressure	2	1	29,30
2. Reactor Coolant Outlet Temperature - T_{hot} (Wide Range)	2	1/loop	29,30
3. Reactor Coolant Inlet Temperature - T_{cold} (Wide Range)	2	1/loop	29,30
4. Pressurizer Pressure - Wide Range	2	1	29,30
5. Pressurizer Water Level	2	1	29,30
6. Steam Generator Pressure	2/steam generator	1/steam generator	29,30
7. Steam Generator Water Level - Wide Range	2/steam generator	1/steam generator	29,30
8. Refueling Water Storage Tank Water Level	2	1	29,30
9. Auxiliary Feedwater Flow Rate	2	1	29,30
10. Reactor Cooling System Subcooling Margin Monitor	2	1	29,30
11. Pressurizer Safety Valve Position Indicator	1/valve	1/valve	29,30
12. Containment Water Level (Narrow Range)	2	1	29,30
13. Containment Water Level (Wide Range)	2	1	29,30
14. Core Exit Thermocouples	4/core quadrant	2/core quadrant	29,30
15. Reactor Vessel Water Level	2*	1*	31,32
16. Neutron Flux Monitor (Power Range)	2	1	29,30

*A channel is eight sensors in a probe. A channel is OPERABLE if four or more sensors, two or more in the upper four and two or more in the lower four, are OPERABLE.

TABLE 4.3-7

POST-ACCIDENT MONITORING INSTRUMENTATION SURVEILLANCE REQUIREMENTS

<u>INSTRUMENT</u>	<u>CHANNEL CHECK</u>	<u>CHANNEL CALIBRATION</u>
1. Containment Pressure	M	R
2. Reactor Coolant Outlet Temperature - T_{hot} (Wide Range)	M	R
3. Reactor Coolant Inlet Temperature - T_{cold} (Wide Range)	M	R
4. Pressurizer Pressure - Wide Range	M	R
5. Pressurizer Water Level	M	R
6. Steam Generator Pressure	M	R
7. Steam Generator Water Level - Wide Range	M	R
8. Refueling Water Storage Tank Water Level	M	R
9. Auxiliary Feedwater Flow Rate	M	R
10. Reactor Coolant System Subcooling Margin Monitor	M	R
11. Pressurizer Safety Valve Position Indicator	M	R
12. Containment Water Level (Narrow Range)	M	R
13. Containment Water Level (Wide Range)	M	R
14. Core Exit Thermocouples	M	R
15. Reactor Vessel Water Level	M	R
16. Neutron Flux Monitor (Power Range)	M	R

Reactor Coolant System

1990